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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,358	07/05/2001	Naimish Patel	SYCMR-027XX	2146

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EXAMINER	
TRAN, DZUNG D	
ART UNIT	PAPER NUMBER
2633	

DATE MAILED: 02/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/899,358

Applicant(s)

PATEL ET AL.

Examiner

Dzung D Tran

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 8-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 8-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. Applicant's election with traverse of species 1, claims 1-2 and 8-11 on paper dated 09/17/2004 is acknowledged. The traversal is on the ground(s) that the examiner fails to state any basic whatsoever in support of the restriction requirement. This is not found persuasive because examiner is already supplied the figures per each species.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2 and 8-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Liu et al., Routing, Wavelength Assignment and ADM Optimization on DWDM Rings, Bell Laboratories, Lucent Technologies, March 6, 2000 Informs Telecom Conference.

Regarding claim 1, Liu discloses a method for assigning a set (e.g. set is same demands of Liu reference) of predetermined lightpath connections between nodes (1, 2, 3, 4, 5, 6 of figure on page 3) to wavelengths in a wavelength-division multiplexed optical ring communications network, comprising the steps of:

Art Unit: 2633

- (a) determining whether a subset of the lightpath connections exists so that each of the nodes includes exactly one of an origination for one of the lightpath connections, a termination for one of the lightpath connections, and a traversal of one of the lightpath connections (for example the figures of page 3, 10, 11, and 12 clearly shown a full circle of the lightpath that connected to all the nodes (node 1 to 6) and each node can be an origination for one of the lightpath connections, a termination for one of the lightpath connections, and a traversal of one of the lightpath connections);
- (b) assigning said subset (e.g. subset is same as tour of Liu reference, see page 9) determined at said step (a) to one of the wavelengths (see page 7); and
- (c) Removing said subset determined at said step (a) from said set of lightpath connections (page 13).
- (d) repeating said steps (a)-(c) until no more of said subsets are determined to exist (see pages 9, 13).

Regarding claim 2, Liu further discloses in page 13 the steps of to find the tour T (e.g. same as subset of the lightpath or full circle lightpath) from the tours set, assign a wavelength channel to the tour T and then remove it from the set until there are no more tours left which is inherently as (e) determining whether any of the wavelengths do not have any of said lightpath connections assigned thereto; (f) determining whether any of said lightpath connections remain in said set; (g) selecting one of said lightpath connections determined to be remaining in said set at said step (f); (h) moving said one lightpath connection selected at said step (g) to one of the wavelengths determined not to have any assigned lightpath connections at said step

Art Unit: 2633

(e); and (i) repeating said steps (e)-(h) until no more of the wavelengths are determined not to have any assigned lightpath connections at said step (e).

Regarding to claim 8, Liu discloses a method for analyzing predetermined lightpath arcs in a wavelength-division multiplexed optical ring communications network to form complete lightpath circles around the ring, comprising the steps of:

(a) forming a partial circle from the predetermined lightpath arcs (step 1, pages 11);

(b) iteratively identifying complete lightpath circle subsets of lightpath arcs which have been determined to form a complete lightpath circle from said partial circle (step 1, pages 12) and (c) removing the lightpath arcs of each said complete lightpath circle subset from the remaining ones of the predetermined lightpath arcs (step 1, pages 12); and

(d) repeating said steps (a)-(c) whenever one said complete circle subset is created until no more of said complete lightpath circle subsets are identified at said step (b) (page 9 and step 1 of page 10-12).

Regarding claim 9, Liu further discloses lightpath arcs comprise lightpath segments around the ring (see figures of pages 11, 12).

Regarding claims 10 and 11, Liu further discloses partial circle and complete lightpath circle comprises a set of said lightpath arcs which do not overlap any other

Art Unit: 2633

segments of lightpaths in said set and form a continuous portion around the ring
(pages 7, 11, 12).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Cosares et al. U.S. patent no. 5,546,542. Method for efficiently determining the direction for routing a set of anticipated demands between selected nodes on a ring communication network

b. Simmons U.S. patent no. 6,396,852. Ring bundling in the design of rings for telecommunications network

c. Wan et al. Grooming of arbitrary traffic in SONET/WDM rings, Global Telecommunication Conference- Globecom'99


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung D Tran whose telephone number is (571) 272-3025. The examiner can normally be reached on 9:00 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2633

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DT
11/30/2004


M. R. SEDIGHIAN
PRIMARY EXAMINER